

**REMARKS**

In the October 27, 2009, Office Action, the Examiner:

- a. objected to claim 19 under 37 CFR 1.75(c) as being of improper dependent form;
- b. rejected claims 25 and 26 under 35 U.S.C. 112, second paragraph, as being indefinite;
- c. rejected claims 25 and 26 under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements;
- d. rejected claims 15, 17 and 21-23 under 35 U.S.C. 102(e) as being anticipated by MacMichael et al, USP6,987,228;
- e. rejected claim 15 35 U.S.C. 102(b) as being anticipated by Kastner, USP3,580,433;
- f. rejected claims 15, 17, 18 and 21-23 under 35 U.S.C. 102(b) as being anticipated by Abbott, USP5,618,177;
- g. rejected claims 15, 17 and 18 under 35 U.S.C. 102(b) as being anticipated by Johnston, USP5,305,912; and
- h. objected to claim 28 as being dependent upon a rejected base claim, indicating the claim would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

By this Amendment, Applicants have amended

- i. amended claim 15 to recite a feeder and that the impulse assembly is configured to impart energy to the hopper without substantially imparting energy to the feeder;
- ii. amended claim 19 to recite that the feeder is configured to introduce cryogenic particles into the flow of transport gas;
- iii. amended claim 25 to recite that the vibrator is configured to impart energy to the hopper; and
- iv. cancelled claims 29-38.

Applicants respectfully request reconsideration of the objection to claim 19. The Examiner objected to claim 19 stating that claim 19 “fails to provide any structural features to further limit the structural features of the particle blast apparatus of claim 15”. Claim 19 as amended states specifically that the feeder is “configured to” introduce cryogenic particles into the flow of transport gas. Claim 15, as amended, recites that the feeder is “configured to introduce said particles into the flow of transport gas”. Claim 19 adds the limitation that the feeder is configured to introduce cryogenic particles into the flow of transport gas. It is well within the knowledge of a person of ordinary skill in the art that a feeder must be specifically configured to handle cryogenic particles in order to be able to introduce such particles into the transport gas flow.

In paragraph 7 of the Office Action, the Examiner asserts that “to introduce said particles into the flow of transport gas” is a functional recitation and therefore receives no patentable weight. However the Examiner has ignored the entire limitation, which is in fact structural: Claim 19 recites a “feeder configured to introduce cryogenic particles into the flow of transport gas”. This limitation is not mere function: It recites a feeder structured to introduce cryogenic particles into the flow of transport gas. Applicants note that claim 15, which has been amended to include similar language without reference to cryogenic particles, also recites a feeder so specifically structured.

The Examiner’s rejection of claims 15, 17 and 21-23 based on MacMichael et al, USP6,987,228, cannot stand. MacMichael is not available under 35 U.S.C. §102(e). As the Examiner indicates, the changes made to 35 U.S.C. §102(e) in 1999, do not apply to MacMichael. Instead, the date under §102(e) is based on the date the requirements of 35 U.S.C. §351(c) (1), (2) and (4). As indicated on the front of MacMichael, field (86), that date is December 2, 2002. The present application is a continuation of USSN 10/142,270 (now USP6,726,540), which was filed on May 9, 2002, almost seven months before the relevant date of MacMichael. In fact, the priority date for the claims at issue with this rejection go back to September 8, 2000, the filing date of the earliest parent application. (USSN 10/142,270 is a CIP of USSN 09/658,359, filed on September 8, 2000 (now USP6,524,172) and a CIP of USSN

10/123,974 filed on April 17, 2002 (now USP7,112,120). Thus, the rejections based on MacMichael cannot stand.

The Examiner rejected claim 15 under 35 U.S.C. §102(b) as being anticipated by Kastner USP3,580,433. Kastner discloses a cigarette tube packaging apparatus, and lacks, *inter alia*, a feeder configured to receive particles from the hopper and introduce the particles into a flow of transport gas, as required by amended claim 15. Thus, Kastner does not anticipate claim 15. Additionally, Applicants note that Kastner is non-analogous art, not in any way related to the field of endeavor of the present invention.

The Examiner rejected claims 15, 17, 18 and 21-23 under 35 U.S.C. §102(b) as being anticipated by Abbott USP5,618,177. Abbott pressurized feeder vessel that is supposed to feed powdered material into a stream of propellant gas. Abbott has a cone 50 which receives material from an upper cap 32. Pressurized gas is introduced into the chamber above the cone 50 through fitting 60. An inlet nozzle 70 extends up from the diaphragm assembly 66 at the bottom of the cone 50. A vibrator 72 is mounted to the diaphragm assembly 66.

The Examiner asserts the position that the vibrator 72 is carried by the cone 50 and therefore meets the limitation in claim 15 of an impulse assembly configured to impart energy to the hopper.

However to the extent that Abbott is interpreted as disclosing structure that meets the limitation of amended claim 15 of a feeder configured to receive particles from a hopper and introduce those particles into a flow of transport gas, substantial energy is imparted to that structure by the vibrator 72, contrary to the limitation of amended claim 15 that the impulse assembly is “configured to impart energy to said hopper **without substantially imparting energy to said feeder**” (emphasis added).

Thus, Abbott does not anticipate claim 15, or claims 17, 18 and 21-23 dependent therefrom. Nor does Abbott teach or suggest changing the configuration disclosed such that the vibrator 72 imparts energy to the cone 50 without substantially imparting energy to the structure that could be interpreted as meeting the feeder limitations of claim 15. Such a change, in addition to being clearly well outside the teaching of Abbott would require a significant structural change – completely changing the manner in which the inlet nozzle 70 is mounted to the cone 50 such that


energy delivered to the cone 50 does not get imparted to whatever structure is considered to meet the feeder limitations. Thus, Abbott does not render any of the claims obvious.

The Examiner rejected claims 15, 17 and 18 35 U.S.C. §102(b) as being anticipated by Johnston USP5,305,912. Johnston discloses a granular material flow divider, and lacks, *inter alia*, a feeder configured to receive particles from the hopper and introduce the particles into a flow of transport gas, as required by amended claim 15, and claims which depend therefrom. Thus, Johnston does not anticipate any of claims 15, 17 and 18. Additionally, Applicants note that Johnston is non-analogous art, not in any way related to the field of endeavor of the present invention.

Applicants submit that the claims as currently pending are allowable, and request that all claims be allowed. The Examiner is invited to contact the undersign by telephone or by email at [eacheson@fbtlaw.com](mailto:eacheson@fbtlaw.com) if there are any remaining issues.

Respectfully submitted,

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